THE GENUS ANONYMOS AND ITS NOMENCLATURAL SURVIVORS

DANIEL B. WARD

Thomas Walter, in his pioneer descriptive study, *Flora Caroliniana* (1788), named and described over 300 species which he believed to be new to science. A majority of these species truly were new, and Walter's names are of familiar occurrence in articles dealing with the flora of the southeastern United States.

Among his many new species Walter detected representatives of what he considered to be undescribed genera. He recognized 32 of these new genera and placed in them 52 species, about half also new, the rest transfers from other genera. He named four of these genera, containing eight species, in a conventional manner, while he modestly labeled the remaining 28 with the ambiguous pseudonym *Anonymos*.

Although there has never been doubt that Walter intended Anonymos to be merely a provisional generic name, there has been dispute as to whether the specific epithets published under this name were available for transfer to more precisely defined genera. In the United States, following the lead of M. L. Fernald and S. F. Blake, modern authors have treated Walter's epithets as legitimate and have recognized their transfer to other genera. But in June, 1950, the Nomenclature Section of the VIIth International Botanical Congress (Stockholm) decreed otherwise, voting that all "binary combinations of a specific epithet with the word Anonymos" were illegitimate.

Illegitimacy of the epithets used by Walter in connection with the provisional name *Anonymos* means, of course, that they are not available for transfer to other genera and Walter cannot properly appear in the conventional author citation of the legitimate name. But illegitimacy does not mean that the same epithet cannot be used for the same

The Code (Art. 23) does permit the optional inclusion of Walter's name if enclosed in brackets. An alternative and perhaps preferable method of full citation is the use of "ex" beween Walter's name and that of the publishing author (Rec. 46A).

species by a later author; if an epithet from an illegitimate name is used again in a different genus it is treated, not as a transfer, although that may have been the intent of the later author, but for all practical purposes as a new epithet.

Even preceding the vote against Anonymos it was realized, as has recently been pointed out again by Wilbur (Rhodora 63:37. 1961), that many of Walter's epithets were transferred to other genera by J. F. Gmelin in his Systema Naturae, published in 1791 and 1792, before other authors had occasion to re-describe and rename the same plants. Gmelin, it is true, often failed to provide a specific description, but this requirement for valid publication is fulfilled in the case of monotypic genera by the generic description, abstracted from Walter, and in all cases by reference to Walter and the appropriate specific description. Often validation is further secured by the existence of specimens which may be taken to be types in the John Fraser collection on deposit at the British Museum. The familiar epithets of Walter, then, remain available for those plants where they have been used in the past, the only changes occurring in the author citation.

A few of the epithets transferred by Gmelin resulted in the formation of unfamiliar synonyms such as *Mattuschkia aquatica*, not recognized by him to be based on the long known *Saururus cernuus* L. But 19 of Walter's *Anonymos* epithets, together with a twentieth omitted by Gmelin but picked up by Willdenow, survive to the present in the correct names of members of the Southeastern flora. With the expectation of providing a convenient source for determining the proper citation for these names, the following list has been prepared.

Agalinis setacea (J. F. Gmel.) Raf., New Fl. 2: 64. 1837, replaces A. setacea (Walt.) Raf. (syn. Gerardia setacea (Walt.) J. F. Gmel.; Gerardia rejected for conservation, Taxon 10:124. 1961). Basonym (Gerardia setacea J. F. Gmel., Syst. 2:928. 1792) is inadequately described ("G. foliis setaceis, caule ramosissimo, floribus terminalibus"), but is validated by reference to Walter (Fl. Carol. 170. 1788).

Burmannia capitata (J. F. Gmel.) Mart., Nov. Gen. Sp. 1: 12. 1823, replaces B. capitata (Walt.) Mart. Basonym (Vogelia capitata J. F. Gmel., Syst. 2: 107. 1791) lacks specific description, but is validated

by generic description and by reference to Walter (Fl. Carol. 69. 1788).

Crotalaria rotundifolia J. F. Gmel., Syst. 2: 1095. 1792, replaces C. rotundifolia (Walt.) Poir. in Lam. (syn. C. maritima Chapm.). Description is inadequate for separation from C. angulata Mill. ("Cr. foliis rotundatis integris pilosis sparsis, caule subdecumbente"), but is validated by reference to Walter (Fl. Carol. 181. 1788) and by Walter's type (photo, Rhodora 50: plate 1107. 1948). C. rotundifolia Poir. in Lam. is a later homonym; Poiret (Enc. suppl. 2: 402. 1812) described a quite different plant and made no reference to Walter or Gmelin.

Cynoctonum sessilifolium J. F. Gmel., Syst., 2: 443. 1791, replaces C. sessilifolium (Walt.) J. F. Gmel. Description is inadequate ("C. foliis sessilibus"), but is validated by reference to Walter (Fl. Carol. 108. 1788).

Dioscorea quaternata J. F. Gmel., Syst. 2: 581. 1791, replaces D. quaternata (Walt.) J. F. Gmel. Description is brief but diagnostic. Reference is made to Walter (Fl. Carol. 246. 1788).

Elytraria caroliniensis (J. F. Gmel.) Pers., Syn. Pl. 1: 23. 1805, replaces *E. caroliniensis* (Walt.) Pers. (syn. *E. virgata* Michx.). Basonym (*Tubiflora caroliniensis* J. F. Gmel., Syst. 2: 27. 1791) lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 60. 1788).

Houstonia procumbens (J. F. Gmel.) Standley, N. Am. Flora 32: 26. 1918, replaces *H. procumbens* (Walt.) Standley (syn. *H. rotundifolia* Michx.). Basonym (*Poiretia procumbens* J. F. Gmel., Syst. 2: 263. 1791) has inadequate description ("P. caule procumbente"), but is validated by reference to Walter (Fl. Carol. 86. 1788).

Lachnanthes tinctoria (J. F. Gmel.) Ell., Sketch Bot. S. C. & Ga. 1: 47. 1816, replaces L. tinctoria (Walt.) Ell. Basonym (Heritiera tinctorium J. F. Gmel., Syst. 2: 113. 1791, "tinctorum") lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 68. 1788).

Liatris graminifolia Willd., Sp. Pl. 3: 1636. 1803, replaces L. graminifolia (Walt.) Willd. Description is adequate. Reference is made to Walter (Fl. Carol. 197. 1788).

Lithospermum caroliniense (J. F. Gmel.) MacM., Metasp. Minn. Val. 438. 1892, replaces L. caroliniense (Walt.) MacM. (syn. L. gmelinii (Michx.) Hitchc.). Basonym (Batschia caroliniensis J. F. Gmel., Syst. 2: 315. 1791) lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 91. 1788).

Micranthemum umbrosum (J. F. Gmel.) Blake, Rhodora 17: 131. 1915, replaces M. umbrosum (Walt.) Blake (syn. M. orbiculatum Michx.). Basonym (Globifera umbrosa J. F. Gmel., Syst. 2: 32. 1791, "umbros") lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 63. 1788).

Nymphoides aquatica (J. F. Gmel.) Kuntze, Rev. Gen. 2: 429. 1891

(as "Nymphodes aquaticum"; Hill (Brit. Herb. 77. 1756) originally spelled the genus "Nymphoides" and treated it as feminine, the gender advised by Rec. 75A of the International Code,) replaces N. aquatica (Walt.) Kuntze. Basonym (Villarsia aquatica J. F. Gmel., Syst. 2: 447. 1791) lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 109. 1788).

Petalostemon pinnatum (J. F. Gmel.) Blake, Rhodora 17: 131. 1915, replaces P. pinnatum (Walt.) Blake (syn. P. corymbosum Michx.). Basonym (Kuhnia pinnata J. F. Gmel., Syst. 2: 375. 1791) has inadequate description ("K foliis pinnatis"), but is validated by reference to Walter (Fl. Carol. 103. 1788).

Planera aquatica J. F. Gmel., Syst. 2: 150. 1791, replaces P. aquatica (Walt.) J. F. Gmel. Specific description is lacking, but name is validated by generic description and by reference to Walter (Fl. Carol. 230. 1788).

Ruellia caroliniensis (J. F. Gmel.) Steud., Nom. Bot. ed. 2. 2: 481. 1841, replaces *R. caroliniensis* (Walt.) Steud. (syn. *R. hybrida* Pursh). Basonym (*Pattersonia caroliniensis* J. F. Gmel., Syst. 2: 925. 1792) lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 168. 1788).

Seymeria cassioides (J. F. Gmel.) Blake, Rhodora 17:134. 1915, replaces S. cassioides (Walt.) Blake (syn. S. tenuifolia Pursh). Basonym (Afzelia cassioides J. F. Gmel., Syst. 2: 927. 1792) lacks specific description, but is validated by generic description and by reference to Walter (Fl. Carol. 171. 1788).

Trilisa odoratissima (J. F. Gmel.) Cass., Dict. Sci. Nat. 55: 310. 1828, replaces T. odoratissima (Walt.) Cass. (T. odoratissima (Michx.) Cass.). Basonym (Chrysocoma odoratissima J. F. Gmel., Syst. 2: 1204. 1792) is questionably adequate ("Chr. foliis radicalibus ovato-oblongis; caulinis oblongo-lanceolatis laevibus, floribus corymbosis"), but is validated by reference to Walter (Fl. Carol. 198. 1788).

Trilisa paniculata (J. F. Gmel.) Cass., Dict. Sci. Nat. 55: 310. 1828, replaces T. paniculata (Walt.) Cass. (T. paniculata (Michx.) Cass.). Basonym (Chrysocoma paniculata J. F. Gmel., Syst. 2: 1204. 1792) is recognizably described ("Chr. foliis lanceolatis adscendentibus, cauleque viseoso simplici pilosis, paniculata terminali"), and is supplemented by reference to Walter (Fl. Carol. 198. 1788).

Uvularia caroliniana (J. F. Gmel.) Wilbur, Rhodora, 63:39. 1961, replaces *U. pudica* (Walt.) Fern. (syn. *U. puberula* Michx.). Basonym (*Erythronium carolinianum* J. F. Gmel., Syst. 2: 546. 1791) lacks specific description, but is validated by reference to Walter ("Anonymos pudic", Fl. Carol. 123. 1788).

Zornia bracteata J. F. Gmel., Syst. 2: 1096. 1792, replaces Z. bracteata (Walt.) J. F. Gmel. Specific description is lacking, but name is validated by generic description and by reference to Walter (Fl. Carol. 181. 1788).

The remaining 24 new names, of the 44 created by Walter by the combination of an epithet with *Anonymos*, appear not to have been used as basonyms by later authors. This neglect is justified since all are either (a) synonyms of earlier names, (b) homonyms resulting from the improper application of an earlier name, or (c) not clearly identifiable. They are listed and tentatively identified below, to complete the disposition of Walter's *Anonymos* epithets.

aquatic[a] (p. 127)
aquatic[a] (p. 137)
caroliniensis (p. 164)
caroliniens[is] (p. 188)
caroliniensis (p. 263)
ciliat[a] (p. 197)

corymbos[a] (p. 139)

erect[a] (p. 86) erect[a] (p. 170)

flava (p. 170) frondos[a] (p. 139) frutescens (p. 186) ligustrin[a] (p. 139) pedicularis (p. 170)

petiolat[a] (p. 108) pilos[a] (p. 197)

purpurea (p. 170) quinat[a] (p. 246)

ramos[a] (p. 198)

repens (p. 110) repens (p. 160) sagittalis (p. 181) sempervirens (p. 98) Saururus cernuus L.

Decodon verticillatus (L). Ell.

probably Verbena canadensis (L.) Britt.

Amphicarpa bracteata (L.) Fern.

possibly Hydnum erinaceus Bull.

possibly Liatris although not so recognized by Gaiser (Rhodora 48:165-183, 216-382, 393-412, 1946)

possibly Vaccinium myrsinites Lam., or V. tenellum Ait., not Vaccinium corymbosum L. according to range given by Camp (Brittonia 5:260. 1945)

Houstonia caerulea L.

identified by Pennell (Scroph. of E. Temp. N. A., 473. 1935) as either Agalinis (Gerardia) linifolia (Nutt.) Britt., A. obtusifolia Raf., or A. tenella Pennell

Aureolaria flava (L.) Farw. Gaylussacia frondosa (L.) Torr.

Wisteria frutescens (L.) Poir. in Lam.

Lyonia ligustrina (L.) DC.

probably Aureolaria pectinata (Nutt.)
Pennell

Cynoctonum mitreola (L.) Britt.

possibly Liatris although not so recognized by Gaiser (op. cit.)

Agalinis purpurea (L.) Pennell

probably Dioscorea quaternata J. F. Gmel., according to Anderson (Rhodora 36:345. 1934)

possibly Liatris although not so recognized by Gaiser (op. cit.)

Dichondra carolinensis Michx.
Phyla nodiflora (L.) Greene

Crotalaria sagittalis L.

Gelsemium sempervirens (L.) Ait. f.